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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,071	09/25/2001	Hans Jedlitschka		2441

7590 04/14/2003
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EXAMINER

NGUYEN, TUYEN T

ART UNIT PAPER NUMBER

2832

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/964,071

Applicant(s)
Jedlitschka

Examiner
Tuyen T. Nguyen

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 21, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Sep 25, 2001 is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bottom of the groove is flat, the oval periphery of the plate, the rounded corners rectangular periphery of the plate and an insulator must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, the term “substantially” is a relative term.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-9, 16-17 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by

Hirose et al. [US 4,641,118].

Hirose et al. discloses an electric coil/winding [figure 5] comprising:

- a plurality of electric insulating plates [10s-10v], each of which including a hole bored [11s-11v] disposed in the middle thereof;

- an electric spiral conductor [12s-12v] disposed on at least one side of one of the plurality of electric insulating plates; and

- notches/openings [12as-12bs-12av-12bv] disposed at outer and inner points of the spiral conductors.

wherein the spiral conductors having identical gyration and wound in opposite directions,

Regarding claim 17, Hirose et al. disclosed supporting means [32, 32a] supporting the electric winding.

Regarding claims 24-26, Hirose et al. further discloses a current formed in the conductors create a magnetic field in each plate with the magnetic fields being additive.

6. Claims 1-2, 23 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadowaki et al. [JP 56-98805].

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Kadowaki et al. discloses an electric coil [figures 3-6] comprising:

- a plurality of electric insulating plate [10], each of which having a spiral groove/dent [11] and a central bore hole [15]; and

- a spiral conductor [9] disposed in the groove of the insulating plate.

wherein the spiral conductors wound in opposite direction.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki et al.

Kadowaki et al. discloses the instant claimed invention except for the specific shape of the conductor, the specific shape of the groove bottom and the specific shape of the electric insulating plate.

The specific shape of the conductor, the groove bottom and the electric insulating plate would have been an obvious design consideration based on the intended application used.

9. Claims 18-19 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki et al. in view of Pan et al. [US 5,847,947].

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Kadowaki et al. discloses the instant claimed invention except for the specific insulating structure between the plate and the winding being enclosed in a container filled with insulating fluid.

Pan et al. discloses a stacked/laminated coil/winding structure having insulating layer between the coil/winding layers, wherein the coil/winding structure being enclosed in a tank filled with insulating oil.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to disposed insulator between the plate and disposed the winding structure in an insulating fluid filled container, as suggested by Pan et al., for the purpose of providing better insulation and cooling for the winding structure.

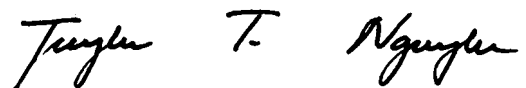
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Elvin Enad, can be reached at (703) 308-7619. The fax number for this Group are (703) 308-7722 and (703) 308-7724.

Any inquiry of a general nature or relating to status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

TTN 



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April 7, 2003